

Work Order ID 67917

Page 1

Tuesday, April 05, 2011 8:57:44 AM

Item ID: D407-558-045

Accept



Setup Start



Revision ID:

Stop



Item Name: Single Cargo Mirror Assembly

Start Date: 4/4/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/8/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start

Approvals: Process Plan: 

Date: 11-04-5

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy bluefile and type labels as per PPP D407-558-045 and DSI 9436
CHG002

Full 11-04-5

11-04-5

110

0.00



Small Fab

Small Fab

Memo

0.00

Small Fab

Assemble as per Dwg D206-558

11/04/25

120

0.00



QC

QC5- Inspect part completeness to step on W/O

Memo

0.00

Quality Control

11/04/25

40

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Revision ID:

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Item Name: Single Cargo Mirror Assembly

Start Date: 4/4/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/8/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
125 Packaging Packaging	Pick Kit Memo	0.00 0.00				11/4/25		sf	
130 QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00		8 11/6/30		(tc)			
140 Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPP D407-558-045 and DSI 9436 Location: _____ PPP Rev: _____ B	0.00 0.00						11/6/30 (1)	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Work Order ID 67917

Page 3

Tuesday, April 05, 2011 8:57:44 AM

Item ID: D407-558-045

Accept



Setup Start



Revision ID:

Stop



Item Name: Single Cargo Mirror Assembly

Start Date: 4/4/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 4/8/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

u/g/c dg
ME
11-06-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 05, 2011 8:57:50 AM

Page 1

Work Order ID: 67917

Parent Item: D407-558-045

Parent Item Name: Single Cargo Mirror Assembly



Start Date: 4/4/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 09-01-15 new issue DD verified by:ec IPP Rev:B
10.06.17 added grommet DD ver:EC IPP REV:C 11.01.19 AS
PER chg002 DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS35489-67 GROMMET		Purchased	No		125		Each	18.0000		1			
<div> <div>Location</div> <div>ST296</div> <div>111193</div> </div> <div> <div>Loc Qty</div> <div>18</div> <div>18</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
AN960JD10 Washer	NAS1149D0363J	Purchased	No			110	Each	0.0000	4	4			
D2011-101 6" Mirror		Manufactured	No			110	Each	38.0000	1	1			
<div> <div>Location</div> <div>ST221</div> <div>65838</div> </div> <div> <div>Loc Qty</div> <div>38</div> <div>38</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
D2052 Mounting Bracket		Manufactured	No			110	Each	11.0000	2	2			
<div> <div>Location</div> <div>ST005</div> <div>59809</div> </div> <div> <div>Loc Qty</div> <div>11</div> <div>11</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													

11/16/03
11/04/25
367743

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 05, 2011 8:57:51 AM

Page 2

Work Order ID: 67917

Parent Item: D407-558-045

Parent Item Name: Single Cargo Mirror Assembly

Start Date: 4/4/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

D2054 Manufactured No

110 Each

22.0000

2

2



Bushing

Location

Loc Qty

Loc Code

GA

22

61834

22

D2055

Manufactured No

110 Each

9.0000

1

1



Clamp

Location

Loc Qty

Loc Code

GA

9

58393

9

D2056

Manufactured No

110 Each

12.0000

1

1



Bell Crank

Location

Loc Qty

Loc Code

GA

12

45542

2

66183

10

D2057

Manufactured No

110 Each

14.0000

1

1



Plug

Location

Loc Qty

Loc Code

ST005

14

60880

14

D2065

Manufactured No

110 Each

9.0000

1

1



Arm

Location

Loc Qty

Loc Code

ST229

9

61381

9

Tuesday, April 05, 2011 8:57:51 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 05, 2011 8:57:51 AM

Work Order ID: 67917

Parent Item: D407-558-045

Parent Item Name: Single Cargo Mirror Assembly

Start Date: 4/4/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

110

Each

2,054.000

2

2



Nut

Location

Loc Qty

Loc Code

ST300

2054

116391

454

116540

800

116549

800

MS27039-1-18

Purchased

No

110

Each

114.0000

2

2



Screw

Location

Loc Qty

Loc Code

ST292

114

113845

14

115589

100

AN3-4A

Purchased

No

125

Each

0.0000

4

4



Bolt

AN526-1032R9

Purchased

No

125

Each

52.0000

4

4



Screw

Location

Loc Qty

Loc Code

ST328

52

116900

52

AN960JD10L

NAS1149D0332J

Purchased

No

125

Each

0.0000

6

6



Washer

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 05, 2011 8:57:52 AM

Work Order ID: 67917

Parent Item: D407-558-045

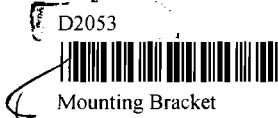
Parent Item Name: Single Cargo Mirror Assembly

Start Date: 4/4/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

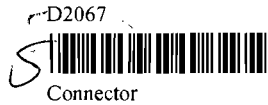


D2053 Manufactured No 125 Each 13.0000



Handwritten signature

Location	Loc Qty	Loc Code
ST005	13	
65837	13	



D2067 Manufactured No 125 Each 0.0000



Handwritten: B67403 11.5/30 SP



D2071-3 Manufactured No 125 Each 10.0000



Handwritten signature

Location	Loc Qty	Loc Code
ST222	10	
64745	10	



D3778-1 Manufactured No 125 Each 5.0000



Handwritten signature

Location	Loc Qty	Loc Code
ST277	5	
65835	5	



MS21042L3 Purchased No 125 Each 2,054.000



Handwritten signature and date 4/4/25

Location	Loc Qty	Loc Code
ST300	2054	
116391	454	
116540	800	
116549	800	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Tuesday, April 05, 2011 8:57:52 AM

Page 5

Work Order ID: 67917



Parent Item: D407-558-045



Parent Item Name: Single Cargo Mirror Assembly

Start Date: 4/4/2011

Required Date: 4/8/2011

Start Qty: 1.00

Required Qty: 1.00

MS21919-DG5

Purchased

No

125

Each

22.0000

2

.2



Clamp



Handwritten signature
11/4/25

Location

Loc Qty

Loc Code

ST306

22

116805

22

Handwritten Z

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

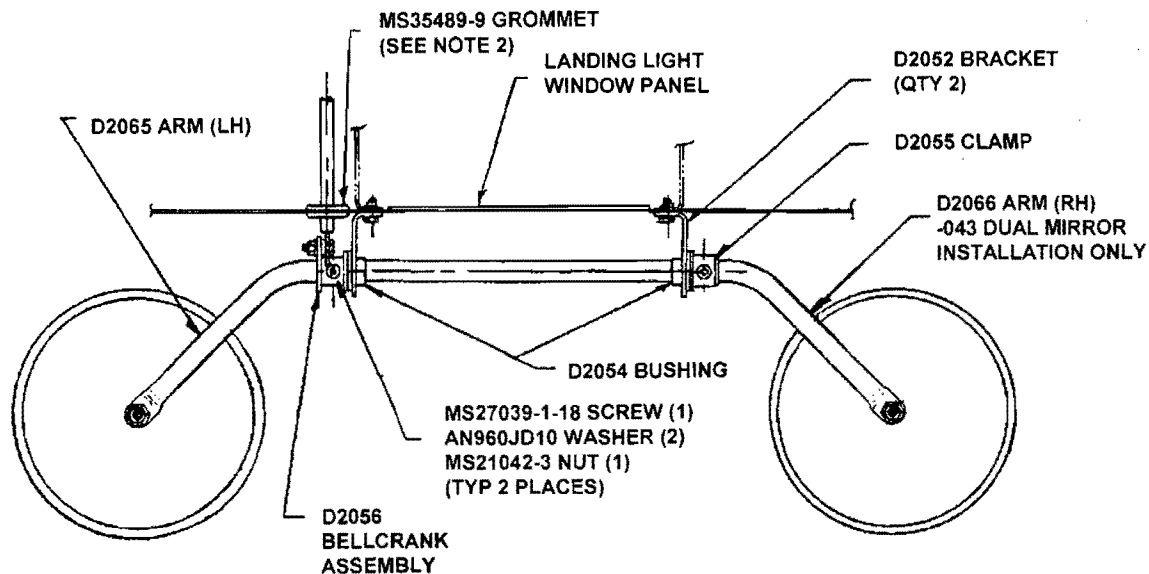


Figure 25.2 – View A: Looking Aft.
(D206-558-043 Mirror Shown)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 67917

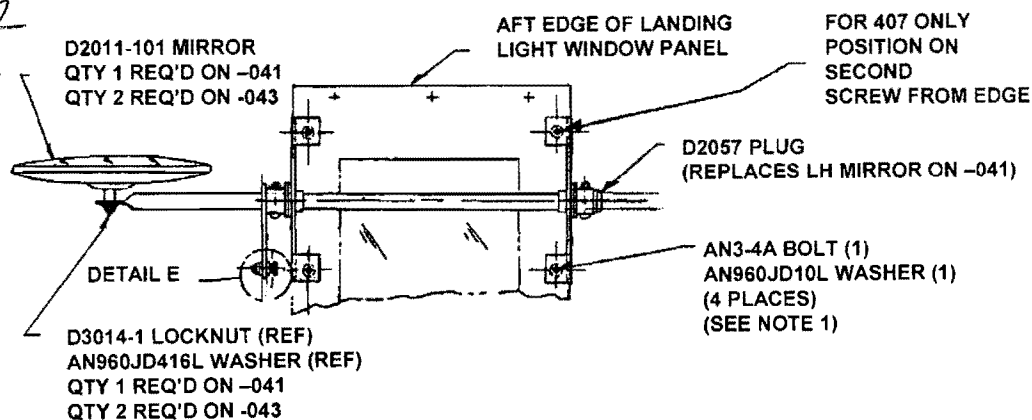


Figure 25.3 – View C: Looking Down on Mirror Installation
(D206-558-041 Mirror Shown)

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

FROM THIS POINT FORWARD, CUSTOMERS SHOULD ORDER D407-558-045/-047 IN LIEU OF D206-558-041/-043 WHEN PROCURING SINGLE/DUAL MIRRORS FOR BELL 407 MODELS. AMEND SECTIONS 4.0 AND 5.0 OF INSTALLATION INSTRUCTIONS D206-558 REV. C OR EARLIER AND 25.3 AND 25.4 OF ICA-D206-558 REV. 0 AS FOLLOWS:

REFERENCE ONLY

4.0 WEIGHT AND BALANCE (D206-558 REV. C OR EARLIER)

25.3 WEIGHT AND BALANCE (ICA-D206-558 REV. 0)

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D206-558-041	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 206A/B/L/L1/L3/L4	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D206-558-043	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 206A/B/L/L1/L3/L4	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg
D407-558-045	2.4 lb	+5.0 in	+12.0 in-lb	+14.8 in	+35.5 in-lb
Bell 407	1.09 Kg	+0.13 m	+0.14 m-Kg	+0.38 m	+0.41 m-Kg
D407-558-047	3.0 lb	0.0 in	0.0 in-lb	+14.8 in	+44.4 in-lb
Bell 407	1.36 Kg	0.0 m	0.0 m-Kg	+0.38 m	+0.52 m-Kg

5.0 PARTS LIST (D206-558 REV. C OR EARLIER)

25.4 PARTS LIST (ICA-D206-558 REV. 0)

Qty -041	Qty -043	Qty -045	Qty -047	Part Number	Description
X				D206-558-041	SINGLE CARGO MIRROR ASSEMBLY
	X			D206-558-043	DUAL CARGO MIRROR ASSEMBLY
		X		D407-558-045	SINGLE CARGO MIRROR ASSEMBLY
			X	D407-558-047	DUAL CARGO MIRROR ASSEMBLY
1	2	1	2	D2011-101	MIRROR ASSEMBLY
2	2	2	2	D2052	BRACKET
1	1	1	1	D2053	BRACKET
2	2	2	2	D2054	BUSHING
1	1	1	1	D2055	CLAMP
1	1	1	1	D2056	BELLCRANK ASSEMBLY
1		1		D2057	PLUG
1		1		D2065	ARM
	1		1	D2066	ARM
1	1	1	1	D2067	CONNECTOR
1	1			D2071	CABLE ASSEMBLY
		1	1	D2071-3	CABLE ASSEMBLY
1	2	1	2	D3014-1	* LOCKNUT
1	1	1	1	D3778-1	BRACKET
4	4	4	4	AN3-4A	BOLT
4	4	4	4	AN526-1032R9	SCREW
1	2	1	2	AN960JD4.16L	* WASHER
4	4	4	4	AN960JD10	WASHER
6	6	6	6	AN960JD10L	WASHER
3	3	3	3	MS21042-3	NUT (or MS21042L3)
2	2	2	2	MS21919DG5	CLAMP
2	2	2	2	MS27939-1-18	SCREW
1	1			MS35489-9	GROMMET
		1	1	MS35489-67	GROMMET

* INCLUDED AS PART OF D2011-101 MIRROR ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 08.12.04
CERT. NO.: SH92-17
ISSUE NO.: 7

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	DSI 9436	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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